



White Papers

From Compliance to Efficiency: The Benefits of Improving Address Quality

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In this whitepaper, we establish four reasons for address quality that go beyond its application to printing and mailing. We later go on to explain other, future applications of address quality data transforms.

Postal addresses used to be good for only one thing – getting mail from the sender to the receiver. To improve delivery success, industry vendors and the US Postal Service cooperated to create software and databases designed to standardize and correct addresses, and sort mail for efficient routing through the delivery network.

Companies have used technology to correct postal addresses before mailing for decades, and those functions are still important.

In today's data-fueled environment, however, customer information affects businesses in many ways. The accuracy of that information is critical. That includes postal addresses, *even if they aren't used for mailing*.

We've written this whitepaper to show marketers and other business users why improving address quality is so important. Mailing professionals already know about USPS requirements for updating data on customers who move, and how to format mail to follow the standards required to earn postage discounts and speed delivery. Other business users, though, often fail to appreciate the impact postal addresses have on various parts of the business unrelated to sending bills, statements, and marketing pieces.

Improving the customer experience is on top of the to-do list for most businesses and non-profits. They understand how relationships with customers, members, or donors directly affect their ability to grow and succeed. They also understand customer data must be current and accurate, or decisions based upon the data will be flawed and perhaps harmful to customer relationships.

Personalized messaging improves the customer experience, but errant personalization has a negative effect. Bad data prevents organizations from communicating with customers as individuals.

A customer address is one data point used by almost all organizations and they use this information in many ways.

In this whitepaper we've identified six areas where address accuracy can impact an organization. We will describe how companies use postal addresses for purposes beyond mail and parcel delivery, and what happens if they neglect to ensure their data is accurate.

1. Address Data is Key Customer Identification Information. Unlike most customer data, an address is a fixed point on the planet. It's not going anywhere.

That's why addresses are solid anchor points companies can use to locate and assign other useful data to customer profiles.

2. Operational Efficiencies. Organizations rely on customer address data to help them make numerous decisions. Poor quality addresses lead to equally poor quality decisions.

3. Regulatory Compliance. Sometimes, organizations require an accurate customer address to meet legal or regulatory responsibilities. Failing to connect customers to their current address can spawn lawsuits, fines, and investigations.

4. Good Addresses Improve Marketing Content ROI. Marketers who fail to validate the deliverability of addresses in their direct mail lists are damaging the performance of their campaigns. They may not even know how many marketing pieces were delivered to the right people at the right time. This artificially lowers response and conversion rates, misleading marketers (and their customers or superiors) about the effectiveness of their efforts.

Address quality software, like the Firstlogic DQ Suite, allows companies to improve and augment their data in several ways. We've included a chapter to show how companies can use address quality software in ways they may not have realized. If your organization isn't benefiting from using address data as well as it could, Firstlogic Solutions is ready to help. We're offering readers a no-fee data quality assessment. See the last page to connect with one of our data quality specialists.

You'll learn valuable facts about your own data and get ideas about how improved quality will help your business.

Reason #1: Address Data is Key for Customer ID

Or, using addresses as Customer ID Information.

Today, data drives almost every business. Companies develop important strategies and make decisions based on what they know about their customers, their products, and the marketplace. Disaster looms unless the data is accurate and complete. Of all the data an organization collects about their customers, one critical item that is verifiable and correctable with well-established processes are physical addresses.

Customers may move (though we can find them), but connections between addresses and fixed points on the planet do not change. That makes addresses reliable data points businesses count on to connect customers to buyer profiles, demographic data, and numerous other attributes they use to increase sales and raise customer satisfaction.

Matching Data in Disparate Corporate Databases Typical corporations scatter customer data among several unconnected and separately maintained databases. Most companies store customer data in CRM systems, but departments like billing and customer service may have separate data sources that contain duplicate or conflicting information.

When organizations acquire data at different times and through several methods and interfaces, it can be inconsistent. Customers may provide formal names in one instance and nicknames in another. Spellings can vary and data may be missing in some files. All this disparity makes it difficult to create a composite customer profile.

Unlike other data, companies can easily standardize and correct addresses with

software. Once this is accomplished, businesses can match records from multiple sources and assemble the 360 degree view of customer relationships necessary to achieve true omni-channel communications.

Personalization

It's no secret that personalized communications are more effective than generic messaging.

Personalization goes beyond peppering a customer's name throughout a form letter. Today, organizations are using what they learn about individuals to control offers, communication channels, images, and text. They create messaging composed for an audience of one.

Address quality plays a big part in making sure personalization efforts connect businesses to customers in meaningful ways. Personalization based on bad data, however, can be counter-productive. City dwellers receiving images of life in a rural community, for instance, may conclude the company doesn't really recognize them as individuals. Prospects who receive irrelevant messages will quickly dismiss marketing pieces and perhaps even take their business to a competitor. Personalized communications are not limited to direct mail. Marketers use standardized address information to add demographic indicators and attributes. These indicators drive the messaging, design, graphics, and offers in all communication channels.

Location-Based Communications

A common practice for direct mail or electronic communications developed by brick and mortar retailers is guiding consumers to stores nearest their homes.

Some may even include maps, transit information, or driving directions. All this effort is for naught if customer address data is wrong or out of date.

Transposed digits in a zip code can lead marketers to believe customers live

hundreds of miles away from their actual locations. An extra digit in a house number can cause mapping applications to fail.

Distances calculated on invalid customer addresses will cause marketers to eliminate good prospects from campaigns while keeping others with low conversion chances.

Congressional Districts

Recent elections have illustrated the value of targeting communications according to voter profiles.

Political marketers are using Big Data concepts to identify habits or preferences of specific audiences.

Correctly assigning prospective voters to their proper congressional districts, which change every 10 years, can improve the effectiveness of online and offline political marketing efforts.

Emergency Services/Public Statistics

One component of homeowner insurance premiums is the building's proximity to fire stations and fire hydrants. Obviously, the insured's physical locations are necessary for insurance companies to assess risk.

Publicly available data and statistics based on location can identify markets or create personalized offers. Companies selling home security systems, for instance, might access local criminal activity information provided by police. Advertisers can weave crime data based on home locations into compelling arguments for installing alarms to combat burglaries and home invasions.

A USPS database converts postal delivery addresses to physical locations, known as 911 addresses.

This function is especially important for fire, rescue, or police response and used primarily for rural-style address data. Sending emergency services to the billing address of a building could be a life-threatening mistake. High quality addresses

and software accessing the USPS database makes emergency dispatch more efficient in times of need.

Voter Registration/Jury Duty

Election officials create voter registration cards and assign polling places based on resident physical addresses. When residents move, they should be notified of their new precincts and voting locations.

Current address information can encourage citizens to vote and discourage voter fraud.

Cities and counties select prospective jurors from eligible residents living in specified geographic areas.

Sending jury summons to citizens' homes after they have moved is a waste of time and money.

Utility Connections

Utilities use address information all the time to inform customers about outages, construction, maintenance, fee changes, or servicing. They may analyze customer address information to allocate maintenance resources, meter readers, or develop routes and territories.

Reason #2: Operational Efficiencies

Aggregated address information is helpful to many business operations. By assessing the number of customers within defined geographic areas, for example, companies can decide how to allocate resources. Examples include establishing territory boundaries or charting efficient routes for company delivery or service vehicles.

Other times, businesses may use addresses of specific customers for operational functions, such as scheduling service calls.

Sales & Service Territories

The number of customers and their geographic distribution determine how companies divide a region into manageable territories. Accurate customer counts and locations are critical. Establishing too many sales or service territories creates extra overhead expense. Too few territories means missed sales opportunities or dissatisfied customers. In some industries, locating parts depots close to concentrations of customer sites allows them to fulfill urgent orders for replacement parts and meet customer expectations for responsiveness.

Staffing & Resource Allocation

Geographic customer distribution plays a role in staffing decisions as well. Organizations with customers in different time zones must have enough customer service or technical support staff on duty corresponding to call volumes projected for customer business hours. Customer location also affects field personnel. Companies may wish to restrict employee recruiting to certain geographic regions based on customer activity. When customer loads shift, companies redistribute employees to serve customers in different geographic areas, splitting or merging territories.

Delivery Routes

Obvious beneficiaries of up-to-date address data are dispatch and delivery. Calculating travel times between customer locations is crucial to on-time arrivals and maintaining positive customer relationships. Efficient routing using address information allows businesses to avoid excessive gas consumption, labor hours, and vehicle maintenance costs. On individual delivery or pick up routes, locations of driver stops can determine how long a route should take employees to finish. A driver delivering to high rise apartments with several packages per building can handle more packages per shift than a route covering rural addresses with long drives between stops.

Common Carrier Selection

Companies keep shipping costs within budgets by selecting the lowest-cost carrier capable of delivering the desired service. Some carriers charge extra to deliver to residences. Others, such as the US Postal Service, do not. Address data that includes commercial or residential address indicators can help shippers make the best choice.

Appointment Scheduling

Unless companies constantly update customer addresses, dispatchers can send service personnel to a customer's old address, unaware they have moved. This is expensive, embarrassing, and causes severe customer relationship erosion. No customer appreciates rearranging their schedule to meet a service person only to learn the service company sent employees to the wrong address.

Accurate address information is also useful in setting customer expectations about arrival times. With good address data, companies could improve customer experience by quoting shorter appointment arrival time windows.

Reason #3: Regulatory Compliance

Just about everyone has to deal with regulations. Industries such as insurance, health care, financial services, or utilities are heavily regulated. Regulations tell us what we can and cannot do. Sometimes they even specify how to do it! You might think address quality has little to do with staying in the good graces of a regulatory body or the eyes of the law, but failing to provide customers with regulated materials or charging customers improperly because of geographically dependent rates can cause big problems.

Fee & Tax Calculations

Where a customer lives can influence how much they pay. Mobile phone companies, for example, collect taxes from their customers on behalf of local governments. If customers move and fail to update their address, the wireless carrier could tax them incorrectly.

Insurance premiums also rely on geographic locations. Insurers can over or under charge drivers who change their commute distances if the company continues assessing risk based on the customer's old address. Other factors, such as where an auto is garaged, or when customers move to a region prone to damaging hailstorms, can also affect auto insurance premiums. Customers who assumed they were covered will be upset when insurers deny claims upon learning the insured's true addresses. Insurance carriers would be smart to check customer addresses against the US Postal Service's address change file regularly to avoid difficult customer service situations.

As customers migrate to electronic bill presentment, they are less likely to inform billers when they move.

Customers will continue to receive and pay bills sent via email or text. They may not even look at their electronic bills, especially if they have enabled automatic payments. Companies can produce months of errant bills before customers notice the errors. Without the USPS providing address updates automatically, companies engaging in electronic delivery must initiate regular address quality maintenance themselves or risk losing track of customer locations.

Escheatment

Another business process affected when companies encourage customers to abandon paper documents is escheatment. Under the law, companies must try to return funds for circumstances such as deposits, earned interest, or unused premiums to customers once they cancel. When companies attempt to mail checks to customers who have converted to electronic communication channels,

the USPS may return the mail. Customers may have moved from their last known address – perhaps several times.

Organizations initiate expensive manual processes to locate these customers. If they cannot find customer addresses, companies must return undelivered funds to the state as unclaimed property – another expensive task. When companies rely on post-mailing address update methods such as Address Correction Service and regular mailings are replaced with electronic messages, they may lose track of their customers. Periodically comparing their data to the US Postal Service's National Change of Address (NCOA) database will keep them in compliance with the law.

Privacy

Some communications, such as those related to financial or health matters contain sensitive information.

Accidentally delivering mail to unauthorized recipients because of flawed address data, or failing to recognize when customers move, can cause privacy incidents. Regulations like HIPAA (the Health Insurance Portability and Accountability Act) allow for enforcement measures like audits, investigations, remediation, or fines. Individuals damaged by such privacy breaches may even sue document producers and business associates involved in producing the mailings.

Duplication of Effort

Poor address quality often results in duplicate data. Unable to recognize two or three data records as belonging to the same customer, companies double or triple the work every time they contact the customers. Failing to use address data effectively also prevents companies from combining multiple family members or roommates. They cannot employ householding techniques to contact multiple accounts with single catalogs or other direct mail communication.

Reason #4: Good Addresses Boost Marketing ROI

Addresses Critical for Targeting

As we've mentioned elsewhere in this paper, postal addresses can be the keys that unlock a wealth of other demographic data used to segment and target direct mail and multi-channel campaigns. Postal addresses can allow marketers to separate residences from businesses or identify residents of singlefamily homes vs. apartments. Neighborhood locations can provide insight into home values, probable income levels, interests, and other important data points. Marketers can use geographic location to calculate distances to retail stores, event venues, or other points of interest, allowing marketers to filter distant prospects from the list. Marketers will realize a better ROI from their campaigns by eliminating unqualified buyers and segmenting the remaining list so they can deliver relevant offers to each demographic group. Without a consistent address quality regimen, marketing campaigns will cost more than necessary and deliver lackluster results.

What Can Address Quality Software Really Do?

Address maintenance serves the same purpose as preventative maintenance for equipment. Companies keep their machinery in top condition to escape the consequences of equipment failure. The same principal applies to address quality. Consistently comparing address data to files of known movers eliminates all those problems that occur because customers no longer live at the location stated in company records. The USPS requires mailers to perform move update processing to qualify for the best postage rates, but as we've pointed out in earlier chapters, outdated address information has negative effects on many operations unrelated to physical mail delivery.

New address data enters organizations constantly, usually in multiple formats and from various sources.

Correcting, verifying, and matching the addresses at every opportunity ensures organizations do not make important decisions based on bad data.

Address quality software handles most of these tasks automatically, generating benefits for many departments and functions within a typical business. Listed below are some of the ways address quality software can make a company more efficient and effective.

Verify City, State, & ZIP

There are 31 cities named Franklin in the USA. Imagine the problems for an organization that listed the wrong Franklin for a customer. Companies might send correspondence to towns thousands of miles away from the intended destination. Address quality software uses massive data files compiled by the US Postal Service to flag any data records where critical data elements do not match verifiable locations.

Standardize Address Lines

In any operation that requires matching data from multiple sources, formatting addresses to meet a single published standard is essential. Data acquired from different sources may include misspelled cities or streets, missing or inaccurate street directionals, or other inconsistencies. Failing to standardize addresses before attempting to match, combine, or dedupe data records creates unsatisfactory results resulting in waste and confusion.

Identify Undeliverable Addresses

Undeliverable addresses are bad news, even if they aren't used for actual mail delivery. Address quality software references databases containing every deliverable address in the USA. The first comparison checks address data against

known ranges of house numbers for the given street. More comprehensive processes can ensure buildings at listed addresses exist, and they are occupied. These address quality measures discourage fraud and saves companies money by not shipping or marketing to vacant properties.

Parse Address Components

Address quality software can separate addresses into their individual components, splitting house numbers, directionals, street names, etc. into separate data fields. Companies spend thousands of dollars on programmer hours to accomplish this task.

Data files may feature address information stored in different locations and with varied layouts.

Particularly difficult is filtering unnecessary, duplicate, or contradictory data from supplied address information. Relevant data might be buried in multiple address lines which could reside anywhere in unstructured data files. The best software finds these addresses and maps pertinent address components into separate data fields for further processing.

Convert Rural Routes to Street Addresses

In some communities, the US Postal Service delivers mail according to Rural Route numbers. This is fine when communicating with rural customers through the mail, but unhelpful for any application based on physical location, such as sales or service calls. Options in address quality software provide physical addresses for such purposes.

Separate Business from Residential Addresses Companies shipping goods to customers benefit from knowing whether addresses on file are residential or business. Some shipping companies include a surcharge for delivering to residences, so accurate information provided by address quality software helps organizations make intelligent shipping choices.

Companies can promote suitable services and goods by distinguishing between the two types of addresses. Promotions to sell overnight janitorial services to home-based businesses, for example would be wasteful. Better to offer weekly

maid service geared to busy home-based workers, and market commercial janitorial offers to businesses in office buildings.

Address Geocoding

Pinpointing the exact physical location of valid addresses is an especially powerful feature of address quality software. Geocode data is important with any printed or digital application involving dynamic maps or travel directions. Rideshare services, for example couldn't operate without the ability to convert address information to physical points in the city.

Direct mailers use geocoding to control mailed advertising distribution. Much more precise than zip code filtering, marketers use geocode data to restrict their direct mail efforts to households within a defined distance from a retail store. Similarly, distance from a store location can trigger variable offers, incenting customers facing longer travel times with higher-value coupons. Organizations with multiple locations can direct prospective customers to the closest branch based on geocode information.

Distance calculations are useful in many business circumstances. Credit card companies, for instance, use geocode coordinates to flag suspicious transactions. Fraud detection routines spot card transactions

occurring far from a customer's billing address. Proprietary algorithms alert cardholders or reject transactions, based on pre-set tolerances.

Suppression Lists

Suppression lists are files of customers or prospects organizations want to eliminate from a promotion or communication, but they can also be useful for other purposes. Common applications of suppression lists include:

- Eliminate current clients from customer-acquisition marketing campaigns
- Drop incarcerated individuals from prospecting files

- Purge deceased customers from files of active customer records
- Exclude addresses on the DMA (Data and Marketing Association) Do Not Mail list

Closing Thoughts

Most organizations view addresses as single-purpose information. Many have made the mistake of minimizing the value of address data as they migrate to mobile or digital-centric communication strategies.

Here's a good example:

We know of companies that have traditionally relied on passive move update methods such as address correction from the US Postal Service to keep customer addresses current. Once they stop mailing material to customers in favor of digital messaging they no longer receive notifications when their customers move.

Nobody recognizes the problem until they encounter a situation that calls for paper documents delivered through the mail. A good portion of those mailed documents may be undeliverable, causing an all-hands-on-deck scramble to acquire correct addresses and re-mail documents to meet deadlines.

About 35 million people move every year. The US Census Bureau reported 11.2% of the population moved in 2016. Unless organizations actively update their records, databases can easily be one-third obsolete within three years.

Companies that fail to assure their addresses are accurate and current can suffer costly consequences, as in the example above. Just as impactful, however, are missed opportunities. As we've illustrated throughout this paper, customer address data is versatile. Easily verified and standardized, properly maintained address information allows organizations to use the data to enrich customer experiences, communicate on a personal level, and realize operational efficiencies.

Address information can change even when customers don't move. There are nearly 42,000 ZIP codes in the USA. In 2016 alone, the US Postal Service added 1.1 million new delivery points. Cities across the nation change street names all the time. All this activity can cause address data to become untrustworthy unless companies take preventative action.

As businesses embrace concepts such as omni-channel communications and 360 degree customer views, every piece of customer data is important because it likely affects other data points. Businesses must maintain data such as customer addresses, or its usefulness as a key identifier will diminish.

Firstlogic Solutions is here to help organizations of all kinds discover the impact their postal addresses are having on their operations. Curious about the health of your address data? See the last page of this paper to request a comprehensive no-fee data quality assessment by one of our data quality experts.

No-Fee Assessment

Firstlogic Solutions specializes in delivering data services solutions to data-driven companies. Firstlogic's products set the standard for address and data quality software when first introduced in 1984. Many users of these products have been customers for more than 35 years, with good reason. Firstlogic's development and support professionals are highly acclaimed and are continuously innovating enhancements to the products, building on their stellar data parsing engine. This engine is acknowledged by many as the best in the business. To find out how software from Firstlogic Solutions can help your organization be more productive, accurate, and competitive, schedule a discovery call.

Gain insight into the health of your organization's data quality! We will process a sample set of your data using the latest data quality tools. Our system will find anomalies in your data and Identify opportunities for improvements.

When you order your no-fee data quality assessment you'll get a data profiling report showing data strengths and weaknesses, along with a custom assessment prepared by Firstlogic data experts.

Data is driving your business. Make sure you're getting the maximum benefit from the customer information you've collected and stored. Contact us today.

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